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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,959

09/28/2005

Yasuhiro Suzuki

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EXAMINER

MCDOWELL, SUZANNE E

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

03/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,959	<b>Applicant(s)</b> SUZUKI ET AL.	
	<b>Examiner</b> Suzanne E. McDowell	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007 and 21 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because of the following informalities: in line 4, “coat” should be “coating”. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Batdorf (US Patent 5,268,203) in view of Hobbs et al. (US Patent 7,312,257). Batdorf teaches the basically claimed coated thermoplastic product, which has a substrate that may be styrene (column 8, lines 46-50); a coating that contains a polymer that is chosen to be compatible with the substrate (column 3, lines 5-7 and column 8m lines 23-30) and may be a polystyrene polymer or copolymer (column 3, lines 22-25) or acrylic (column 8, lines 50-51) or mixtures thereof (column 9, lines 10-12); and pigment, which may be aluminum flake (column 9, lines 39-40). Regarding claim 1, Batdorf does not teach that the pigment was subjected to surface treatment. Regarding claims 2, 3, 5, and 6, Batdorf does not teach the instantly claimed specifics of the surface treated pigment. Hobbs et al. teaches a coating composition with pigments that are encapsulated in a polymer, where the composition is utilized to form plastic products with a sparkling and/or metallized appearance (column 4, lines 26-33). Hobbs et al. teaches that the pigment may be aluminum flakes (column 9, lines 35-37) and the

encapsulating material may be polystyrene, acrylics, or mixtures thereof (column 7, lines 19-23). It would have been obvious to a person of ordinary skill in the art to use the pigment taught by Hobbs et al. to modify the pigment taught by Batdorf in order to form a coated product with a desired finished appearance. The motivation to use Hobbs et al. to modify Batdorf is that both are in the same field of endeavor, that of forming articles with metallized-appearing coatings thereon. The article formed by the teachings of Batdorf as modified by the teachings of Hobbs et al. is equivalent to the instantly claimed article.

Regarding claim 7, Batdorf does not teach the instantly claimed steps of forming the coated pigment. Hobbs et al. teaches that the pigment is formed by dispersing the particles in a monomer or polymer, forming an aqueous reaction mixture, heating and mixing the aqueous reaction mixture to encourage formation of beads, where one such mixture utilized polyvinyl alcohol and styrene, and divinylbenzene, with benzoyl peroxide as an initiator, and aluminum flakes (column 11, line 60-column 12, line 20). It would have been obvious to a person of ordinary skill in the art to use the pigment taught by Hobbs et al. to modify the pigment taught by Batdorf in order to form a coated product with a desired finished appearance. The motivation to use Hobbs et al. to modify Batdorf is that both are in the same field of endeavor, that of forming articles with metallized-appearing coatings thereon. The article formed by the teachings of Batdorf as modified by the teachings of Hobbs et al. is equivalent to the instantly claimed article.

Regarding claim 8, Batdorf does not teach the instantly claimed limitations. Hobbs et al. teaches that the pigment contains between 0.1 and 25 weight percent of material, such as aluminum flake, based on the weight of the encapsulating resin (column 6, lines 15-25). It would have been obvious to a person of ordinary skill in the art to use the pigment taught by Hobbs et al. to modify

the pigment taught by Batdorf in order to form a coated product with a desired finished appearance. The motivation to use Hobbs et al. to modify Batdorf is that both are in the same field of endeavor, that of forming articles with metallized-appearing coatings thereon. The article formed by the teachings of Batdorf as modified by the teachings of Hobbs et al. is equivalent to the instantly claimed article.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Banba (US Patent 4,434,009).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne E. McDowell whose telephone number is (571) 272-1205. The examiner can normally be reached on Mon and Th 5:30am-2pm, Tues 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Art Unit: 1791

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Suzanne E. McDowell/  
Primary Examiner, Art Unit 1791

SEM  
March 13, 2008